

Black Bears in Kentucky

Kentucky Department of Fish and Wildlife Resources #1 Game Farm Road Frankfort, Kentucky 40601 C. Tom Bennett, Commissioner hroughout history, humans have been interested in black bears (*Ursus americanus*). They have been part of our culture in many ways, from Native American ceremonies to teddy bears. Although easily recognized, black bears are not always understood. Misunderstandings about their biology can cause them be feared and adored at the same time.

After years of severely low numbers, the American black bear is making a comeback in many parts of Eastern Kentucky. As their numbers have increased, so has public interest in this species. Understanding the natural history of bears will benefit the public as well as these wondrous creatures.

Historic Range

Black bears once ranged over much of the North American continent, including the vast forests that covered three-quarters of Kentucky. The loss of the American chestnut tree, habitat destruction, and continual human harassment nearly eliminated them from the State by the 1900s. Occasional sightings in remote sections of the Cumberland Plateau continued through the 1970s and increased into the early 1980s. In 2001, bear sightings were recorded in 18 eastern Kentucky counties.

Why Are They Back?

The recent upsurge in verified sightings in Kentucky is primarily due to: (1) natural movement from the surrounding states of West Virginia, Virginia and Tennessee; and (2) an increase in suitable habitat provided by large scale regeneration of forestland.

Biology and Behavior

Although black bears are large, powerful animals well equipped to eat meat, they are actually omnivorous, eating a variety of plant and animal food items. Bears in the Southern Appalachians primarily feed on grasses and fruit during spring and summer, and acorns, beechnuts and other hard mast in fall. The remainder of their diet consists of insects and other invertebrates, as well as dead animals discovered while foraging.

Bears have poor eyesight but a well-developed sense

of smell. Unlike members of the cat family, which have the ability to display or hide their claws, bears have large non-retractable claws useful for climbing, gathering food, and defense. They can also stand erect on their hind legs and walk on the soles of their feet rather than just the toes.

Unlike their grizzly bear relatives, black bears are excellent climbers and can scale most trees for food or protection. Despite their short legs and chunky appearance, they can run in bursts of speed up to 30 mph, but only for short distances. They prefer to slowly wander over large areas in search of food (and in the case of males, a mate).

Black bears breed during summer, but due to an uncommon biological adaptation called "delayed embryo implantation," gestation does not begin until winter hibernation. During this time they can be found in den sites, such as hollow trees, rock cavities or brush piles. Black bears seldom choose large caves or mine openings for dens.

Because they do not eat during hibernation, a considerable fat reserve must be built up during summer and fall. Acorns, beechnuts and other hard mast are important food sources, especially for females about to reproduce. If mast crops are poor, sows may not give birth on a regular basis.

Cubs are born in late January while the female is denning. Usually two cubs are produced, but litters may vary from one to five. Each cub weighs between 8 to 12 ounces at birth. The cubs grow rapidly because they nurse almost continuously until they leave the den in late March or early April. By this time each cub may weigh 5 to 7 pounds or more.

The cubs stay with their mother through summer and den with her again the following winter. Cubs leave their mother when they are 1½ years old. The sow is then free to breed again. Most females reach sexual maturity between 2½ and 3½ years.

Primarily active at night, black bears are sometimes seen during daylight hours, especially in areas where humans routinely feed them. Most sightings are reported between late spring and mid-summer, the peak period for young males to leave their family units and search for home territories of their own.

It is extremely rare for black bears to be aggressive toward humans. They are shy, secretive animals that do not socialize with each other, except in individual family units or during the breeding season. Normally, they will hide or run away to avoid any contact with humans. Providing food to bears can change their behavior and draw them close to humans.

Do not Feed Bears

Feeding or baiting bears in areas with high human populations causes the animals not only to become accustomed to people but also to associate humans with food. This is the formula for a potentially dangerous situation - and the animal is usually the loser.

The best rule to follow is: DO NOT FEED BEARS. Do not allow trash and garbage to collect near your home. Be careful about scraps of food left for pets and always bury carcasses of dead animals. Garbage cans, recently used



barbecue grills, and dumpsites also attract bears. Keep your homesite clean and free of food items by putting your garbage out the morning of collection rather than the night before and feeding outdoor pets during the daytime. In bear country, pet food should be brought inside before dark. Place garbage cans in a protective box with a heavy, latching lid that bears cannot open.

If you see a bear, do nothing. The animal will likely wander away without any prodding from you. Make sure that enticing food items are removed or properly stored to avoid further visits. Remember that bears do not need your help to find food. Those that rely on food from humans often die from unnatural causes.



Trapping and relocating black bears is not always a solution to the problem. Here, university researchers have trapped a female black bear to study her movement patterns.

Bears and Farms

A bear sighting in the wild is rare, even in the most heavily populated range. Bears avoid people, but sometimes they come upon cornfields, beehives or orchards associated with farms. Fortunately, public complaints about damage are easily resolved. Prevention is the best course of action.

Because black bears rarely travel in open spaces, beehives or crops such as sweet corn should be placed as far from woods as possible. When properly maintained, fences can prevent damage. Electric wire or heavy gauge, 8 foot, woven-wire fences with barbed wire will discourage bears.

There are no fumigants, repellants or toxicants registered that will keep bears away, but you can frighten them with loud radios, barking dogs, fireworks, flashing lights or scarecrows. The trick is to use a different method each time to ensure surprise.

What About Trapping?

Trapping and relocating nuisance bears is not always the best course of action. They can return to capture sites from a distance of 100 miles or more. The Kentucky Department of Fish and Wildlife Resources considers live-trapping and relocating a last resort. Although the bear will not suffer any harm, the trauma of capture, immobilization and handling is usually enough to keep the animal from causing additional problems in the area. The first course of action in a nuisance situation is to remove the items attracting the bear.

Live and Let Live

The amount of available habitat in Kentucky limits the number of bears that can live in the state. Our neighbors - Virginia, West Virginia and Tennessee - have larger populations that can sustain hunting. Currently, black bears in

Kentucky are strictly protected. A person convicted of killing one may be fined \$1,000 and/or receive a six-month jail sentence. The wrongdoer may also be required to pay to replace the animal.

The illegal taking of a bear can be a major setback to the recovery of the Kentucky population because they reproduce slowly and live in a limited area of the state. The proper application of legal sport hunting can be an effective means of managing a large population, but Kentucky's population has not reached that level.

Value of Bears

Black bears have significant economic value in many parts of the United States. In addition to the millions of dollars hunters spend pursuing them each year, photographers and wildlife enthusiasts spend thousands traveling to view these creatures.

Medical studies are revealing valuable information on how humans may adjust cholesterol levels and kidney function similar to bears during hibernation.

Perhaps the greatest benefit of black bears is knowing that they are once again roaming Kentucky's eastern forests. With your help, they may regain their former status as a healthy, permanent resident of Kentucky.

Looking for Bear Sign

As they roam the landscape, bears leave behind signs of their presence. One of the best signs to look for is a track in soft soils and mud. They usually move about on all fours, so look for tracks made by both front and hind paws. Front paw prints are 4 to 5 inches long and wider than they are long. Hind paw prints are longer than their width and are usually 6 to 8 inches long. Claw impressions will be well in front of the ball of the foot.

Bears searching for food often rip decaying logs apart looking for grubs, snails and insects. In berry patches, vines will be stripped of berries and leaves. Bushes and trees that produce fruit will often be bent over or have broken limbs.

Bear droppings, which are larger than those of foxes, bobcats and other animals, usually contain a variety of seeds.

Claw marks can often be seen on trees. Sometimes bears climb trees while playing or searching for food. They also will rub against trees to shed their winter coats. Rough-barked trees, such as pines and oaks, are frequently used for this activity, so look for long, course black hairs caught in the bark if you suspect a bear rubbed there.

This brochure was funded in part with Wildlife Conservation Restoration Program (WCRP) funds.



KENTUCKY SPORTSMEN PAY FOR CONSERVATION

The Department of Fish and Wildlife Resources is funded through the sale of hunting and fishing licenses. It receives no general fund tax dollars.

If you feel you have been discriminated against by this department, please contact Department of Fish and Wildlife Resources, #1 Game Farm Rd., Frankfort, KY 40601; phone: (502) 564-3400.

